



## DSA BULLETIN

**Date:** March 7, 2003 (revision)

**To:** Owners of Pre-Check (PC) Drawings & Specifications  
Division Of the State Architect Regional Offices  
Energy Review Consultants

**From:** **Division of the State Architect**  
**Department of General Services**  
**State of California**

**SUBJECT: PRE-CHECK (PC) DESIGNS - ENERGY COMPLIANCE REVIEW**

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### **Purpose**

This bulletin clarifies requirements for the energy compliance review of Pre-Check (PC) Designs submitted to the Division of the State Architect (DSA) for approval.

All public school facility construction within the State of California, including relocatable classrooms must comply with all Parts of Title 24 (California Building Standards Code), including the energy efficiency standards contained in Part 6, Title 24, California Energy Code. The provisions of Part 6, Title 24 apply to the building envelope, space-conditioning systems, water-heating systems, and the lighting systems of buildings.

### **PC Designs Subject to Energy Compliance Review**

Any PC Design application submitted to DSA for approval of compliance with Title 24, 2001 edition, and containing buildings with space-conditioning systems, water-heating systems, and/or lighting systems is subject to energy compliance review.

**As of May 1, 2003**, any project application that utilizes a PC Design will be reviewed at the time of submittal to DSA to determine whether or not the PC Design is approved for the climate zone in which the project is located.

If the PC Design is not approved for the project's climate zone, the project applicant and the PC Owner will be notified by DSA that approval of the PC Design for the climate zone in which the project is located is required prior to approval of the project application.

Review and approval of the PC Design for the project's climate zone will be processed as a revision. The approved revision to the PC Design must be incorporated into the project application.

### **Energy Compliance Documentation Requirements**

1. For any PC Design subject to energy compliance review, the PC application submitted to DSA must include one copy of the signed Certificate(s) of Compliance (refer to Section 10-103 (a), Part 1, Title 24).

2. Energy compliance documentation must be approved for each climate zone in which a project utilizing the PC is anticipated to be located, as determined by the PC Owner. The climate zones for which the PC has been designed shall be noted on the PC cover sheet, including which orientation(s) were modeled and the worst-case orientation using the compliance method submitted (see item #3).

Any building design that complies with the worst-case orientation (see item #3) in climate zones 14, 15 and 16 may be approved, from an energy standpoint, for placement in any climate zone. Climate zones 14, 15 and 16 represent the most severe types of weather (both heating and cooling) in California.

3. For each climate zone considered, energy efficiency analysis must demonstrate compliance for the highest energy use (i.e. worst-case) orientation for each building within the PC Design. This worst-case orientation may be determined by performing rotations about the compass in 30 degree increments starting at 0 degrees for each building.
4. When a PC Design contains multiple building configurations or variations of the building envelope, space-conditioning systems, lighting systems, or occupancy, the documentation author must define, in writing, the worst-case assumptions used for the energy analysis, including which orientation(s) were modeled and the worst-case orientation using the compliance method submitted, and which occupancy or occupancies are to be approved.

### **Process for Review of Energy Compliance of PC Designs**

For any PC Design application designed to conform to Title 24, 2001 edition, and for any revision affecting the energy efficiency compliance of a previously approved PC Design, the following steps must be completed:

1. Upon submittal of a PC Design application or revision of an approved PC Design, DSA will issue the DSA Pre-Check (PC) Energy Review Notification within 10 working days to the PC Owner or Design Professional (in General Responsible Charge of the PC Design).

This notification provides contact information for the Energy Review Consultant (ERC) commissioned by DSA to review and verify the PC's energy efficiency compliance.

2. The PC Owner or Design Professional must submit directly to the ERC one complete set of plans & specifications (same as submitted to DSA) and energy compliance documentation, as prescribed per Section 10-103 (a), Part 1, Title 24. If the performance approach is used, the energy efficiency analysis must utilize a California Energy Commission (CEC) approved program (i.e. EnergyPro 3.1 or Perform 2001). The PC Owner shall summarize which climate zone(s) are to be approved, which orientation(s) were modeled and the worst-case orientation using the compliance method submitted, and which occupancy or occupancies are to be approved.
3. Mixed occupancies within designs should be modeled for lighting as designed, except where the PC Owner wants approval of other occupancies with differing lighting power densities. In the latter case, one computer model could be used for approval but the base case model must contain the lowest proposed lighting power density and the proposed case model must contain the highest lighting power density.
4. Mixed occupancies within designs should be modeled for minimum ventilation as designed, except where the PC Owner wants approval of other occupancies which have higher minimum ventilation rates. In the latter case, the highest minimum ventilation rates for the worst-case occupancy desired by the PC owner will be used for determining compliance.

5. During the review phase, the ERC may contact the Design Professional to request additional information or to address questions regarding the PC's energy compliance.
6. Upon approval of the energy compliance documentation by the ERC, the PC Owner or Design Professional will receive one copy of the approved Certificates of Compliance (e.g. ENV-1, LTG-1, MECH-1) or Title 24 PERF-1 and the completed *Energy Compliance Review* form (ECR-2).

The completed DSA ECR-2 form will indicate the climate zone(s) in which the PC Design complies with efficiency standards, and any other restrictions required to ensure that the PC Design meets energy efficiency standards.

Costs incurred by DSA to review and approve energy compliance shall be recovered from the PC Owner. Recoverable costs include the energy review consultant's fee and DSA staff time. Energy review costs will be included in the DSA plan review invoice issued upon completion of the PC Design back-check.

Any questions regarding this Bulletin may be directed to DSA headquarters, Panama Bartholomy, (916) 445-4229 or [panama.bartholomy@dgs.ca.gov](mailto:panama.bartholomy@dgs.ca.gov).